

CHRYSLER CENTER, Building 108
(Engineering Garage)
Highland Park
Wayne County
Michigan

HAER No. MI-142-A

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MICH
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21-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Great Lakes Systems Office
Department of the Interior
1709 Jackson Street
Omaha, Nebraska 68102-2571

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HISTORIC AMERICAN ENGINEERING RECORD
CHRYSLER CENTER, Building 108 (Engineering Garage)

Location: Quad: Highland Park, Michigan 1:24,000
UTM: 17.328570.4696460

Dates of Construction: 1909

Architects: Albert Kahn and/or Julius Kahn

Builder: Heitsch Construction Company, General Contractor, Pontiac, Michigan

Present Owner: The Chrysler Corporation
800 Chrysler Drive East
Auburn Hills, MI 48326

Present Use: Vacant

Significance: This is one of the earliest industrial buildings constructed at this site. Although about half of the original building is no longer standing, the original concrete frame and roof are intact. It was designed by Albert Kahn, with his brother Julius Kahn probably involved in its construction, through his Trussed Concrete Steel Company. It is an early example of a one-story reinforced-concrete factory building using extensive clerestory roof monitors to admit natural light.

Historian: Charles K. Hyde, Wayne State University, Detroit, Michigan 48202, February-May 1997

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This building first appeared on a 1910 site plan showing the properties owned by the United States Motor Company at this location in Highland Park. This is a one-story rectangular reinforced concrete structure built at the north end of the property for the Gray Motor Company, a manufacturer of gasoline engines. The 1910 plan also shows a detached rectangular office building north of the factory building. Gray Motor occupied only the western third of the structure, leased the middle section to the Alden-Sampson Manufacturing Company and leased the eastern third to the Maxwell-Briscoe Motor Company. The Alden-Sampson Company was an early manufacturer of gasoline-powered trucks offering its vehicles in 1905-1913 before going out of business. The Maxwell-Briscoe Motor Company (1904-1910) combined the automobile engineering and design talents of Jonathan Dixon Maxwell (1864-1928) with the financial and business ability of Benjamin Briscoe (1867-1945).¹

Gray Motor Company was established in 1906 in Detroit to manufacture stationary and marine gasoline engines. After moving into this building in Highland Park, Gray Motor was making 12,000 engines a year. The exact history of the building cannot be documented. Several hand-written historical notes written by Chrysler plant engineers suggest that this was built by Julius Kahn (1874-1942), Albert Kahn's engineer brother and collaborator. Julius patented the "Kahn Trussed Bar" in 1903 and established the Trussed Concrete Steel Company to make the bars. He also organized his own construction company. Albert Kahn Associates' Job Book shows the firm doing work for Gray Motor Company (Job No. 491) around 1910 and an office building for Alden-Sampson (Job. No. 481) in 1910, but no drawings or other information have survived. The Sanborn fire insurance map of 1915 gives 1910-1911 as the date of construction. A sign on the roof of the building at the time of completion proudly announced, "Building Erected by Heitsch Construction Company, General Contractors, Pontiac Michigan."²

This is an early example of a reinforced concrete industrial building, but a relatively minor one. Kahn designed far more substantial factory buildings for Packard (1905 and later), Chalmers (1907), Ford (1909-on), and Dodge Brothers (1910-1911). Other Detroit architects were using reinforced concrete as well, including George D. Mason for the Cadillac Motor Car Company Amsterdam Street plant (1905).³

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A 1915 Sanborn insurance map of the area shows few changes since 1910. The Gray Motor Company factory is labelled "Maxwell Motor Company, Inc. Oakland Avenue Plant No. 2" and identified as a machine shop. Site plans for 1921, 1925, and 1929 identify the structure as "Motor Machine & Assembly," with the same configuration as in 1910. An electrically-powered industrial truck struck a supporting pillar in the eastern part of the building sometime after 1929, causing the collapse of a large section of the building. This was not rebuilt, but instead the Fluid Coupling Building (1939), still extant, was constructed on the site of the collapsed section. The original Gray Motor Company building was 150' wide and 1,200' long, but the structure which remains standing is 150'0" X 660'6". In the 1949 site plan, it is renamed "Engineering Maintenance and Garage," reflecting its new function. More recently, "Engineering Garage" is the name of choice.⁴

The building's original reinforced-concrete frame and roofline are largely intact, except that the building is only about half its original length. The clerestory roof monitors no longer open to permit natural ventilation and virtually all of the glass panes are covered with insulating material, so they do not admit any natural light. The east half of the building is partitioned into offices, while the western half is used as a garage for test vehicles.

NOTES

¹A series of site plans for the Oakland Avenue plant for the years 1910, 1921, 1925, 1928, and 1949 are appended to an unpublished typescript, A History of Events Leading Up to the Formation of the Chrysler Corporation, With Charts Showing Changes in the Highland Park Area and Items of General Interest in Connection With the Growth of the Automobile Industry, compiled by the Budget Office of the Highland Park Manufacturing Division, September 4, 1952. The typescript, which can be found in the Chrysler Historical Collections, provides additional details (pp. 6-8) on these early companies. For Alden=Sampson, see James A Wren and Genevieve J. Wren, Motor Trucks of America: Milestones, Pioneers, Roll Call, Highlights (Ann Arbor: University of Michigan Press, 1979), pp. 33, 42, 357. For Maxwell-Briscoe, see George S. May, "Maxwell-Briscoe Motor Company" in George S. May, editor, Encyclopedia of American Business History and Biography: The Automobile Industry, 1896-1920 (New York: Bruccoli Clark Layman, 1990), pp. 329-333.

²The first listing of the Gray Motor Company was in the 1906 Detroit City Directory, with a factory and shipping office at the corner of Wight and Leib in Detroit. The Highland Park address is first given in 1913. See Ralph L. Polk and Company. Detroit City Directory (Detroit: R.L. Polk and Company, 1906-1913). For more details on the Gray Motor Company, see A History of Events Leading Up to the Formation of the Chrysler Corporation, p. 7. Finally, a photograph of this building, described as belonging to the Alden-Sampson Manufacturing Company, dated ca. 1911, identifies the builder as the Heitsch Construction Company. The photograph is part of the Lozarnick Collection of the National Automotive History Collection at the Detroit Public Library.

³Grant Hildebrand, Designing For Industry: The Architecture of Albert Kahn (Cambridge, MA: MIT Press, 1974), p. 26; Albert Kahn Associates, Job Book; and Charles K. Hyde, Detroit: An Industrial History Guide (Detroit: Detroit Historical Museum, 1980), Sites 5, 6, 8, 15, and 18.

⁴Sanborn Map and Publishing Company, Insurance Maps of Detroit, Michigan, Part 10 (New York: Sanborn Map and Publishing Company, 1915) and A History of Events Leading Up to the Formation of the Chrysler Corporation, p. 8.

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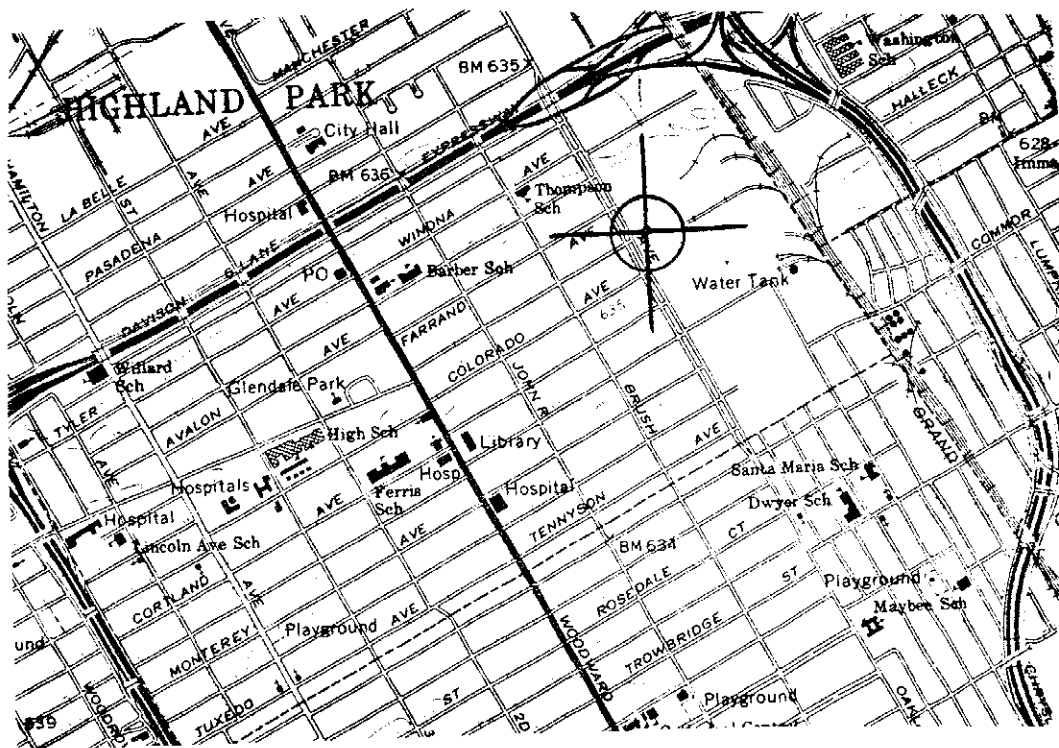
SOURCES OF INFORMATION

See the list of sources for the overview report.

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GENERAL FLOOR PLAN

